

We claim:

1. A substantially purified nucleic acid molecule that encodes a plant protein or fragment thereof comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 43701.

5 2. The substantially purified nucleic acid molecule of claim 1, wherein said plant protein is a rice protein.

3. A substantially purified rice protein or fragment thereof, wherein said rice protein is encoded by a nucleic acid molecule that comprises a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 43701.

10 4. A transformed plant having a nucleic acid molecule which comprises:
 (a) an exogenous promoter region which functions in a plant cell to
 cause the production of a mRNA molecule;
 (b) a structural nucleic acid molecule comprising a nucleic acid
 sequence selected from the group consisting of SEQ ID NO: 1
 through SEQ ID NO: 43701 or complements thereof;
 (c) a 3' non-translated sequence that functions in said plant cell to
 cause termination of transcription and addition of polyadenylated
 ribonucleotides to a 3' end of said mRNA molecule.

15 5. The transformed plant according to claim 4, wherein said structural
 nucleic acid molecule is a complement of any of the nucleic acid sequences of SEQ ID
 NO: 1 through SEQ ID NO: 43701.

6. The transformed plant according to claim 5, wherein said plant is cotton,
 wheat, rice, soybean or maize.

7. The transformed plant according to claim 5, wherein said plant is maize.

8. The transformed plant according to claim 5, wherein said plant is soybean.
9. The transformed plant according to claim 5, wherein said plant is rice.

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